

WHAT IS CLAIMED IS:

1. A control apparatus for an internal combustion engine, comprising:
 - a plurality of intake air amount control devices which control an amount of air drawn into a combustion chamber in association with a depression stroke of an accelerator pedal; and
 - a controller which delays, by a delay period, a response of each of the intake air amount control devices with respect to a depression of the accelerator pedal.
2. The apparatus according to claim 1, wherein
 - the delay period is set such that timings when the intake air amount control devices affect an amount of air drawn into the combustion chamber coincide with one another.
3. The apparatus according to claim 1, wherein
 - the delay period is a sum of a control-holding period for each of the intake air amount control devices and a response delay period thereof, and
 - the controller sets the control-holding period for each of the intake air amount control devices such that delay periods for the intake air amount control devices coincide with one another.
4. An intake air amount control apparatus for an internal combustion engine, comprising:
 - a plurality of intake air amount control devices which control an amount of air drawn into a combustion chamber in association with a depression stroke of an accelerator pedal; and
 - a controller which sets control timings of the intake air amount control devices such that the control timing of at least one of the intake air amount control devices differs from the control timing of at least one other of the intake air amount control devices.
5. The apparatus according to claim 4, wherein
 - the controller sets the control timing of each of the intake air amount control devices based on a response delay period for each of the intake air amount

control devices such that the control timing of at least one of the intake air amount control devices differs from the control timing of at least one other of the intake air amount control devices.

5 6. The apparatus according to claim 5, wherein

the controller sets the control timing of each of the intake air amount control devices such that timings when the intake air amount control devices affect an amount of air drawn into the combustion chamber coincide with one another.

10 7. The apparatus according to claim 4, wherein

the controller sets the control timing of each of the intake air amount control devices such that timings when the intake air amount control devices affect an amount of air drawn into the combustion chamber coincide with one another.

15 8. The apparatus according to claims 4, wherein

the intake air amount control devices are disposed in a passage through which air is drawn into the combustion chamber and include a throttle valve for adjusting a flow area of the passage.

20 9. The apparatus according to claim 4, wherein

the intake air amount control devices include an intake air control valve which diverges from an intake passage, which is disposed in at least one of a plurality of branch passages for introducing air into the combustion chamber, and which adjusts a flow area of said at least one of the branch passages.

25 10. The apparatus according to claim 4, wherein

the intake air amount control devices include an intake valve of the combustion chamber.

30 11. A method of controlling an intake air amount of an internal combustion engine which is provided with a plurality of intake air amount control devices which control an amount of air drawn into a combustion chamber, comprising the steps of:

delaying, by a delay period, a response of each of the intake air amount

control devices with respect to a depression of the accelerator pedal.

12. A method of controlling an intake air amount of an internal combustion engine which is provided with a plurality of intake air amount control devices which
5 control an amount of air drawn into a combustion chamber, comprising the steps of:

setting control timings of the intake air amount control devices such that the control timing of at least one of the intake air amount control devices differs from the control timing of at least one other of the intake air amount control devices.